

### Important

1. Maintenance can only be operated by authorized professionals.
2. Get lightening protection measures ready in thunderstorm weather.
3. Do not touch the antenna when the transmitter is powered on.
4. Do not power on the transmitter if the antenna is not well connected.
5. Do not use the transmitter under the explosive environment, such as gas/refueling station, etc.
6. Do not use the transmitter in the extreme dusty, damp or high temperature environment.
7. Be sure to comply with the rules released by the local radio administrations.



1

### Introduction

- The product crust is made of high-quality aluminum, which also is the heating panel of power amplifier RD06HVF1, with blue backlight LCD to display five digits of frequency.
- The motherboard is applied with chip BH1415F, which is the new-generation integrated NC FM stereo radio chip by ROHM, built-in PLL frequency, audio pre-emphasis, limiter and low pass filter circuit. Make sound more sweet.
- The control board is designed with high performance MCU STC series, its performance is better than AT89C2051.
- With microphone and audio input of the amplifier, adjustable input level. Transmitting power can switch between 1W and 6W(/7W).
- Good shielding, compact structure, small size, generous appearance.
- Notes: Inner circuit board version may vary or slightly modifications.

### Operation Instructions

#### 1. How to set up?

- (1) Connect the rubber antenna to the 'ANT' interface.
- (2) Connect your audio source to the 'Audio' interface via audio cables.
- (3) Connect the power supply to the 'Power' interface. (Attention, please note recommended operating voltage is 12V, the polarity of the tip is inner positive and outer negative)
- (4) Turn on the transmitter by pressing down power button to prepare broadcasting.
- (5) Select an unused FM station in your area. The station can be totally static or with some bleed over on it. The Stereo FM Transmitter should have no problem walking over a radio station's bleed over.
- (6) Set the Stereo FM Transmitter to that unused FM station, you can use the control panel button '+' or '-' to adjust frequency, the stepped frequency is 100KHZ.
- (7) Set the frequency of your FM Radio to the same frequency which the transmitter is broadcasting on.
- (8) Listen and Enjoy, it's so easy!

#### 2. How to switch power between 1W and 6W(/7W)?

- (1) Hold the power button and plug in the power adapter then release the power button, LCD displays L(or H), H represents 6W(/7W) and L represents 1W. Press + (or -) button to switch power to H (or L) then press power button to confirm.
- (2) LCD displays upper frequency (it should display 108MHz in normal status). The frequency can be adjusted by + or - button and press button to confirm. Please note upper frequency that can be set is 108MHz.
- (3) Then LCD displays low limit frequency (it should display 76/87.00MHz in normal status). The frequency<sup>2</sup> can be adjusted by + or - button and press button to confirm. Please note the lowest limit frequency that can be set is 76MHz.
- (4) Press the power button to confirm until LCD displays OFF.
- (5) Then press the power button to power on the transmitter, it should in working status.

#### 3. How to connect 2 separate inputs to this transmitter?

- (1) The transmitter has two audio input interfaces, one on the left marked as Audio and the other on the right marked as MIC. Generally speaking, the left is connected with audio input, such as CD player, Line in of the computer sound card.
- (2) Certainly, you can connect to two audio equipments, such as the left is connected to the output of the sound card and the right is connected to MIC, therefore, you can hear two inputs on the receiver.
- (3) However, if you have a Mixer, mix them first then connect to Audio interface is recommended.
- (4) In addition, note that MIC port only support electret condenser microphone, but not moving coil microphone

#### 4. How to transmit farther?

- (1) As the transmission range depends on many factors, the true distance is based on not only the transmitter power and its performances, but also on the sensitivity of the receiver, antenna of the receiver, buildings and other obstructions which between the transmitter and the receiver.
- (2) The distance will much farther in barrier-free environment, such as open countryside. Therefore, it is not scientific simple to say how far it transmits. The transmission range may differ greatly with the

same transmitter in different surroundings.

- (3) If you want to get a farther range, what you focus on is to buy a high quality antenna and try to set it higher.

## Technical Specification

Power supply: DC9-15V (12V recommended)  
Operating current: Less than 2A  
Frequency range: 87 ~ 108 MHz  
Frequency step: 100 kHz  
Frequency stabilization method: PLL  
Frequency stability:  $\pm 10\text{ppm}$  ( $-10^\circ\text{C}$  to  $+60^\circ\text{C}$ )  
Frequency deviation: Less than  $\pm 75\text{ kHz}$  (100%)  
Working method: Continuous  
Clutter and Harmonic: Less than -60dB  
SNR: More than 60dB  
Stereo channels crosstalk: -50dB  
Audio frequency response: 20 to 15000Hz  
Audio distortion: Less than 2%  
Modulation: 15%  
Input level: -15dBV (adjustable)  
RF output impedance: 50 Ohm  
RF output power: 1W/ 6W (/7W) (can be switched)  
Reference range: 5-10Km (barrier-free)  
Unit dimension: 160mm \* 95mm \* 54mm

3

## Facts & Tips

- The FM Transmitter will not drift between stations because of our advanced stereo PLL Digital Tuner Technology.
- The FM Transmitter use the control panel buttons to control the frequency that it broadcasts on so if the power is lost and then restored it will begin broadcasting back on that exact same frequency. This avoids any need to reset the FM Transmitter back to the frequency you originally wanted.
- We use a switch to turn the transmitter on and off. This allows the transmitter to automatically turn back if power were to be lost and then restored.
- The FM Transmitter is designed to operate non-stop 24/7.
- The higher you place the antenna the farther you will transmit.
- If you can match a good antenna to the FM transmitter, the effect will be better.

(The end)